

OPERATION MANUAL

SERVE-OVER

IDA COMPACT S



freor
thinking green


Table of contents

1.	GENERAL INFORMATION	4
1.1.	Manufacturer information	4
1.2.	Dimensions	6
1.3.	Package dimensions.....	6
2.	SAFETY	8
2.1.	Dangers due to misuse.....	8
2.2.	R290 refrigeration cabinets safety guidelines.....	8
2.3.	Material damage during prolonged shutdown	9
2.4.	Personal protective equipment.....	10
2.5.	Electrical voltage	10
2.6.	Refrigerant circuit.....	11
2.7.	Recommended working conditions and ambient temperature.....	11
2.8.	Purpose of use	11
3.	UNPACKING.....	12
4.	INSTALLATION	15
4.1.	Requirements for installation the serve-over.....	15
5.	ALLOWABLE LOAD	16
6.	REPLACEMENT OF PANORAMIC ENDWALL.....	17
7.	ASSEMBLY OF GLASS COVERS.....	19
8.	ELECTRICAL CONNECTION	22
9.	DRAINAGE.....	22
10.	MAINTENANCE.....	23
10.1.	Information on temperatures.....	28
10.2.	Defrosting	28
10.3.	Cleaning	28
11.	DISPOSAL.....	29
12.	STORAGE	29
13.	TESTING	29

14. ACCESSORIES.....	30
15. TECHNICAL DATA	30
15.1. Electrical layouts.....	30
15.2. Failures and troubleshooting.....	30
15.3. Control settings	30
16. MEANINGS OF SYMBOLS.....	31

1. GENERAL INFORMATION

1.1. Manufacturer information

Manufacturer, address	FREOR LT, UAB Katiliskiu St. 92, LT - 02212 Vilnius, Lithuania T: +370 5 232 9188	
	Made in Lithuania	

Customer	
Installation date	
Installation place	
Start of the product operation	



The serve-over IDA Compact S is labelled with technical data sticker. The sticker is attached to back part of refrigeration unit. The sticker provides information about model, voltage, and product code. It is strongly recommended to read sticker information before starting any work with serve-over. **(Fig. 1)**.





FREOR LT, UAB Katiliskiu St. 92 LT-02212 Vilnius, Lithuania freor@freor.com www.freor.com			
Type:			
Serial no:			
Year:			
Product code:			
Rated voltage, [V]: Frequency, [Hz]: Rated current, [A]: Defrost power input, [W]: Anti-condensation heating element power input, [W]: High pressure, [Bar]: Low pressure, [Bar]: Max pressure, [Bar]: Climate class:			
Refrigerant:		GWP:	
Quantity of refrigerant, [kg]:			
CO2 equivalent mass of the F-gas, [t]:			
 MADE IN LITHUANIA			
			

Fig. 1 Example of sticker

- Intention of this document is to provide information about maintaining and operating of the serve-over IDA Compact S.
- In accordance with the EU Directive - the refrigeration unit is electrical refrigeration machine; therefore, the focus is to ensure safety during operation.
- The operation manual of the serve-over IDA Compact S must be kept at the place of operation. It must be available to technical personnel, service personnel and repair specialists at any time.

1.2. Dimensions

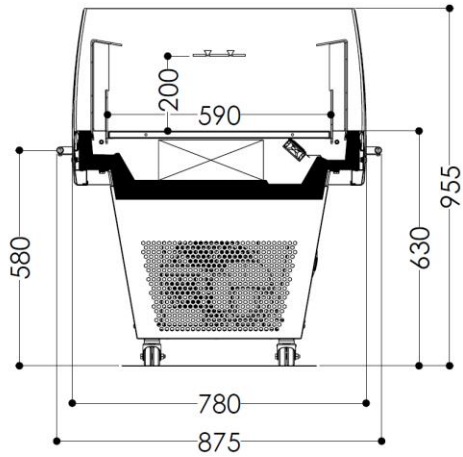


Fig. 2. Dimensions of IDA Compact S

1.3. Package dimensions

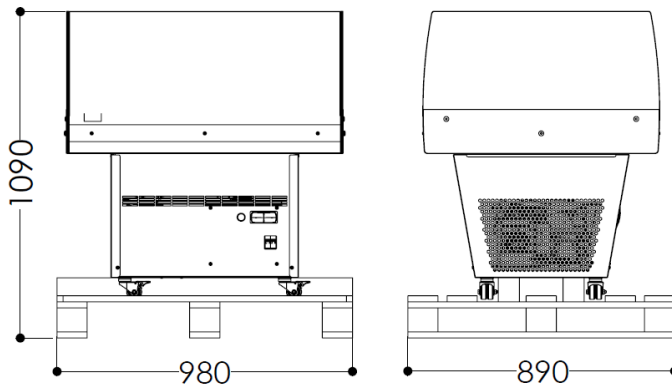


Fig. 3. Dimensions of IDA Compact S 900 1-unit package

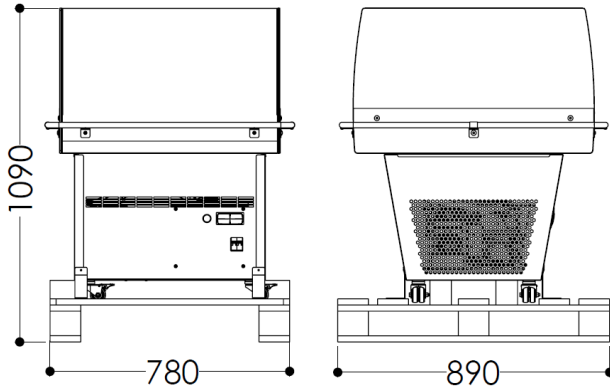


Fig. 4. Dimensions of IDA Compact S 700 1-unit package

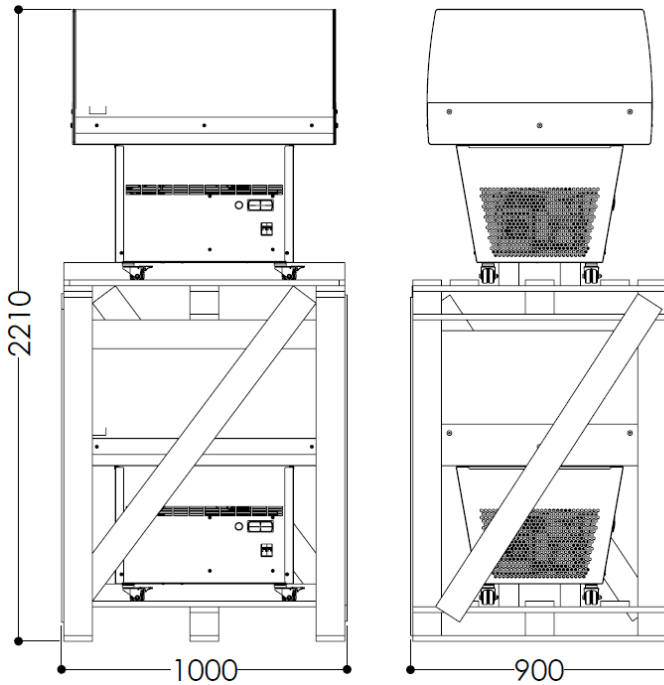


Fig. 5. Dimensions of IDA Compact S 900 2-unit package

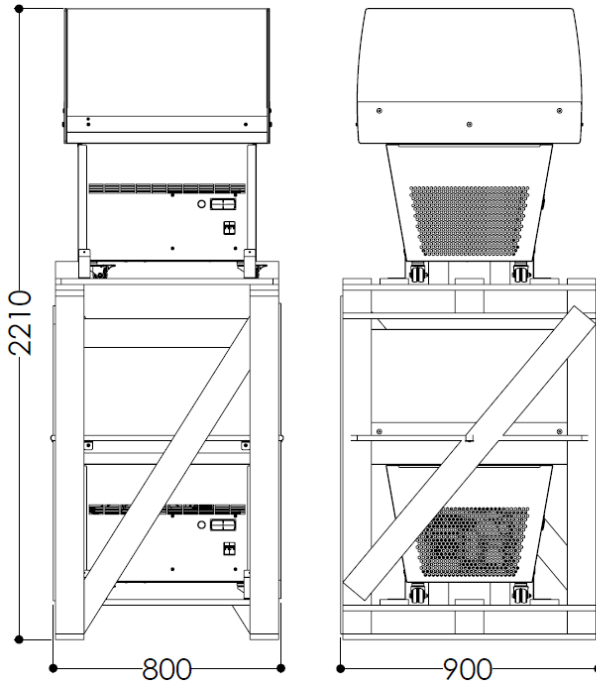


Fig. 6. Dimensions of IDA Compact S 700 2-unit package

2. SAFETY

2.1. Dangers due to misuse

- Only start up and operate the appliance once it has been properly set up and installed and has no obvious defects.
- Do not make any technical changes to the appliance
- Do not store any explosive substances, such as aerosol containers with flammable propellant gas, in the serve-over.
- Do not make any technical changes to the serve-over.

2.2. R290 refrigeration cabinets safety guidelines

Refrigerant R290 (propane gas) is classified as refrigerants of safety group A3. Based on the refrigerant charges commonly used in commercial systems, the system design and risk analysis are in accordance with explosion protection regulations (defined by standard EN378-1).

Safety guidelines:

- Keep ignition sources away (heat, sparks, open flames, hot surfaces).
- Use a damp cloth or sponge to remove condensation water and for cleaning. Do not use dry clothes or sponges to dry the unit. (Risk of electrostatic charge and sparking)
- It is prohibited to cover any ventilation opening of the unit. Safe minimum distance must be kept (between units) to ensure sufficient air access
- Do not use any mechanical devices or other means (e.g., ice scrapers) to accelerate the defrosting.
- Do not use steam or high-pressure cleaners for basic cleaning.
- Only install the units in well-ventilated rooms.
- Do not install the units in cellars or lowered rooms.
- Do not damage the refrigerant circuit.
- Do not expose the unit to temperatures higher than 70°C during transportation and storage.
- Avoid transmitting pulsations and vibrations to the unit.
- Do not allow external forces to act on the appliance, e.g., careless handling with a forklift or floor cleaning machine.
 - Do not crush or bend pipes.
 - Only qualified maintenance personnel may carry out work on the refrigerant circuit.
- Only open the refrigerant circuit and suck off the refrigerant in well-ventilated rooms outside store business hours (when customers are not present) or outdoors.
- Disconnect the unit prior to all maintenance, service, or repair work.
- Disposal of the unit must be performed following Waste & Disposal-Recycling Regulations requirements

Failure to comply with safety requirements could lead to potential health injuries and safety risks.

2.3. Material damage during prolonged shutdown

- Operate the appliance in a stable operating position (horizontal alignment).
- Operate the device only on the designated adjustable feet.
- Do not operate the unit above the climate class specified on the technical data sticker.
- Check that the unit is in proper condition. Any damage must be repaired immediately.
- In the event of a power failure, stored products must be inspected by the operating company (temperature check).
- Check the area in which goods are placed for foreign objects. Remove goods stored incorrectly immediately.

- Do not set up or store the unit outdoors. To ensure good air circulation, maintain minimum distances to surrounding walls and other units.
- Do not attach stickers or films to glass surfaces.
- Do not operate the serve-over if there is any glass damage (cracks, breaks).

2.4. Personal protective equipment

Use hand protection:

- Protection from heavy equipment parts during transport, unpacking, installation, and disposal.
- Protection from sharp edges when unpacking and during setup and installation
- Protection from sharp edges when unpacking and during setup and installation
- Protection from contact with liquid/leaking refrigerant in the event of leakage in the refrigerant circuit.
- Protection from low temperature during loading and cleaning.
- For removing glass parts and glass splinters in the event of glass breakage.

Use eye protection:

- Protection from contact with liquid/leaking refrigerant in the event of leakage in the refrigerant circuit.

Wear protective clothing:

- When loading the serve-over with products, wear appropriate clothing (cold protection).

2.5. Electrical voltage

Only qualified staff may carry out work on the electrical system. In the event of fault messages or damage to the serve-over, contact the maintenance service.

Electrical safety guidelines:

- Do not connect a damaged appliance or damaged parts (such as connecting cables) to the power supply.
- Check to ensure safety devices are complete and working.
- Do not remove protective devices and covers attached to the unit.
- Note the following before connecting to the power supply:
 - Applicable local electrical safety regulations.
 - Applicable standards and safety instructions.
 - The power supply voltage and frequency must match the specifications on the technical data sticker.
- Only trained operating personnel may disconnect the unit.
- Observe the following safety rules if the unit is damaged during operation or prior to maintenance:

- Disconnect the unit (switch off all sources of electrical power).
- Secure the appliance against reconnection.
- Only qualified staff may replace damaged parts (e.g.: connecting cables, lights)
- Do not use extension cords or multiple socket strips.
- Do not use steam or high-pressure cleaners for basic cleaning.
- Do not damage concealed electrical parts. The operator must not drill into the unit or carry out any other work on it.

2.6. Refrigerant circuit

Only qualified staff may carry out work on the refrigerant circuit. In the event of fault messages or damage to the appliance, contact the maintenance service.

2.7. Recommended working conditions and ambient temperature

The serve-over to be operated under suitable ambient conditions (climate class 3):

- Ambient temperature must not fall below +16°C and not exceed +25°C (improper temperature can affect the operation of the serve-over)
 - Relative humidity should not exceed 60% (excess of humidity can affect the dew point parameters)
 - Front airflow rates up to 0.2 m/s (strong front airflow can harm the internal circulation of the open serve-over)
- It is forbidden to exceed the maximum allowable loading of serve-over shelves
- Recommended arrangement of the shelves is specified in the main layout
- It is forbidden to cover air circulation channels (suitable goods arrangement to be used)

2.8. Purpose of use

The serve-over IDA Compact S is intended to be used for the presentation chilled products. IDA Compact S provides average operating temperature (1...+10°C; -1...+7°C; -1...+5°C) in the inner space of the serve-over.

It is forbidden to upload the serve-over with warm goods (temperature of goods to be lower than serve-over operating temperature).

The recommended temperature of uploaded goods is specified by standards of the respective organizations. DIN10508 requirements for the temperatures of uploaded goods are provided below:

$\leq +10$ °C	Fruits, vegetables, butter, cheese, and cheese products
$\leq +8$ °C	Pasteurized products, sour milk
$\leq +7$ °C	Milk and dairy products, delicacies, ready-made food, snacks, sandwiches, green salad, game, salad with mayonnaise sauce, cooked meat products, eggs and their products, sauces
$\leq +4$ °C	Household poultry, minced meat and products, rabbit meat, wild hare meat
$\leq +3$ °C	By-products
$\leq +2$ °C	Pre-packed minced meat, fresh fish (on ice)

The manufacturer is not liable for any damages caused by unintended purpose use of serve-over IDA Compact S is exempted from warranty obligations.

3. UNPACKING

Note the following to prevent the collision or risk of injury to persons when transporting units with forklift:

- Observe transport routes for forklift.
- Secure transported units.
- Only trained personnel may operate industrial trucks.
- Note the centre of gravity of the unit for safe lifting of the load with the forklift. Information is provided on the front and back of the unit packaging.



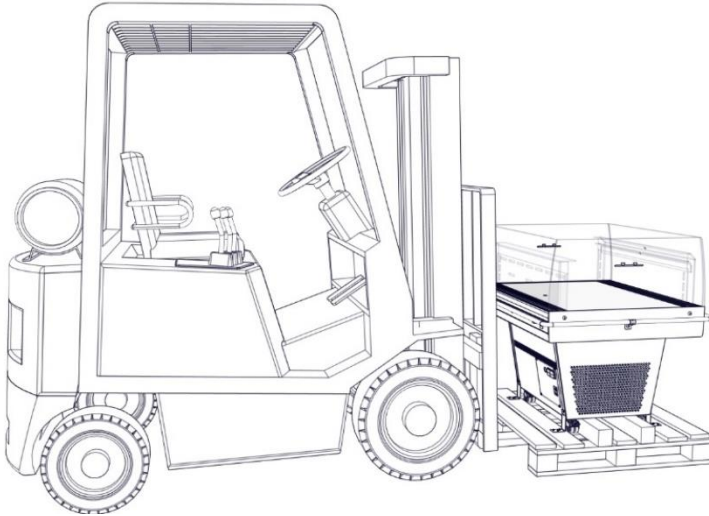
x 2



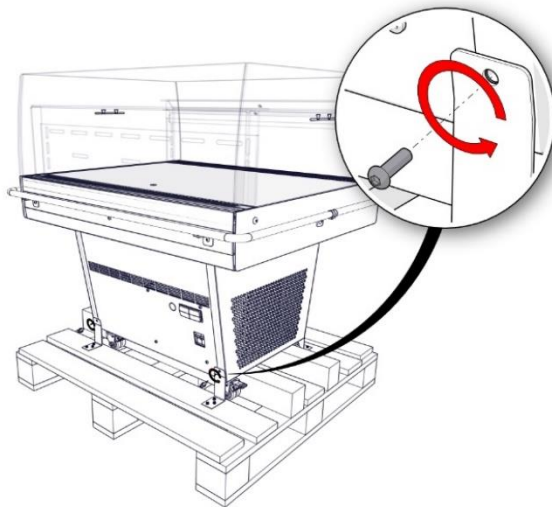
Hex 4



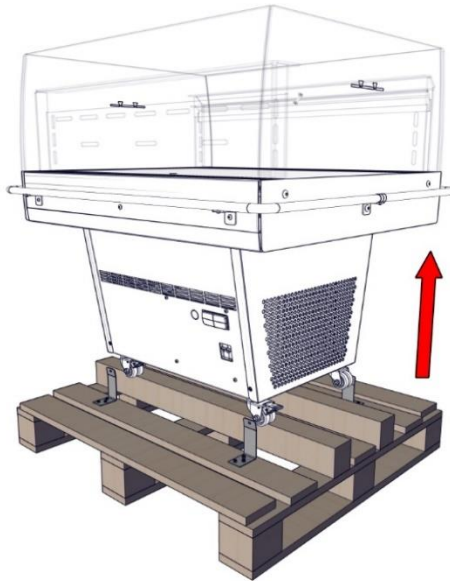
15 min



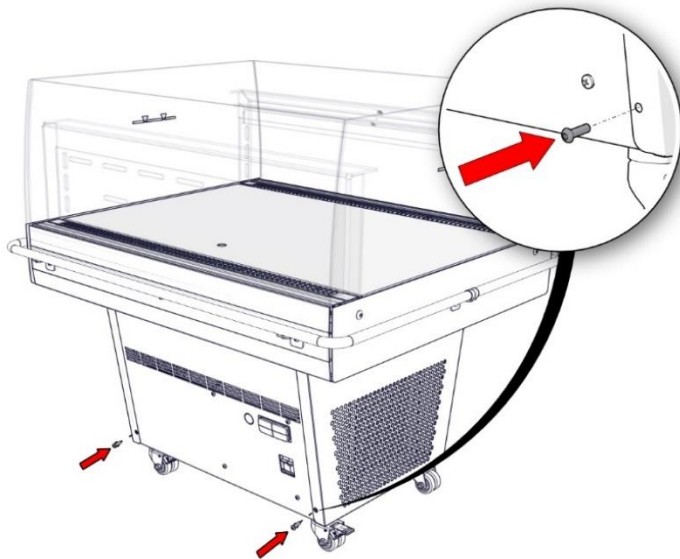
Use appropriate equipment for unit transportation (refer to unit weight and dimension information)



Unscrew the bolts from the sides of the side plates Bolts M6x20 ISO 7380;



Remove the unit from the pallet;



Screw the bolts back into the sides of side plates. Bolts M6x20 ISO 7380.

4. INSTALLATION

4.1. Requirements for installation the serve-over

Installation of the unit must be performed following next requirements:

- The unit must be aligned horizontally (both depth and length) and installed in the stable position.
- Set up the unit only on the designated adjustable legs.
- It is forbidden to install the unit close to any heating equipment or any HVAC elements (air outlet etc.)
- Keep a sufficient distance around the unit. It must be possible to open the doors without any obstructions.

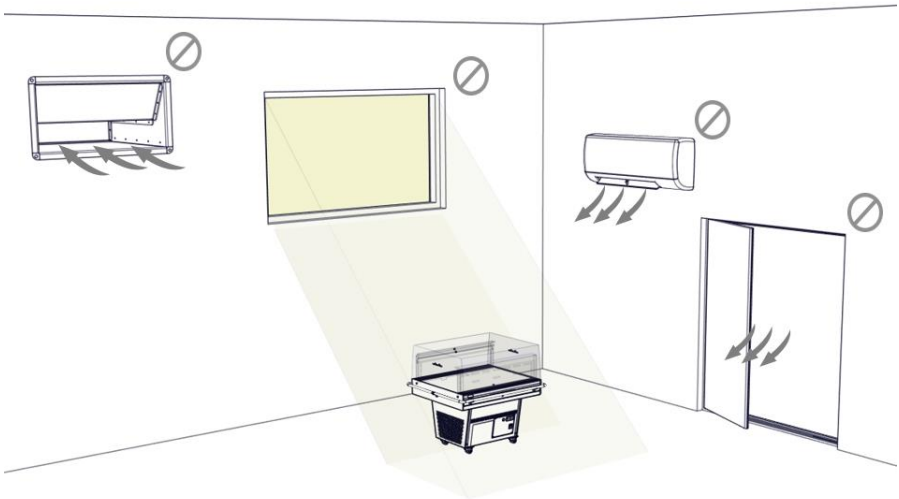


Fig. 7. Example of unsuitable ambient conditions

5. ALLOWABLE LOAD

Serve-over IDA Compact S is equipped with a bottom shelf. It is forbidden to exceed the indicated maximum load. For Ida Compact S the maximum load **cannot be greater than 135kg/m²**.



Fig. 8 Products cannot be placed higher than the height indication sticker

6. REPLACEMENT OF PANORAMIC ENDWALL



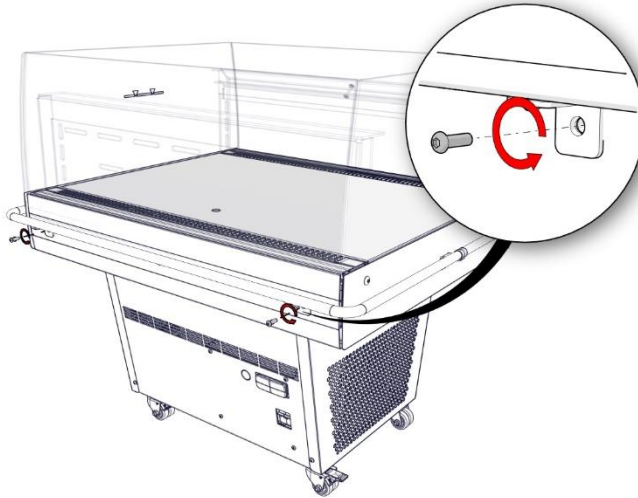
X1



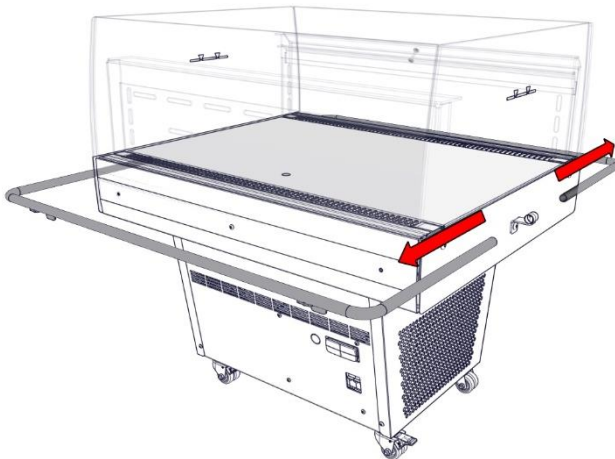
Hex 4, 5



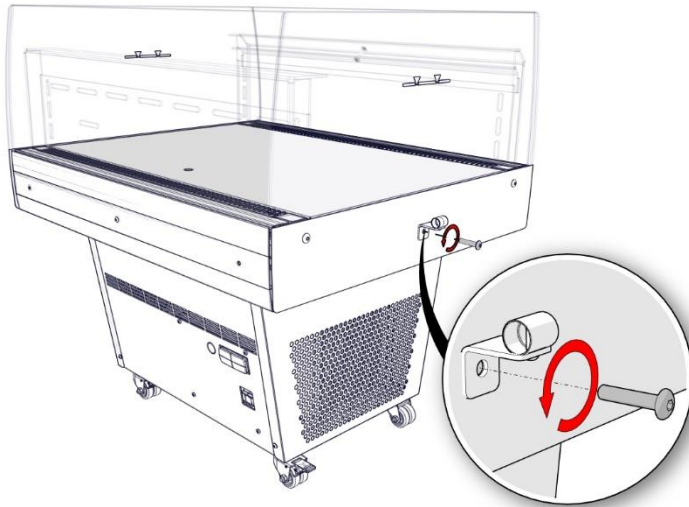
45 min



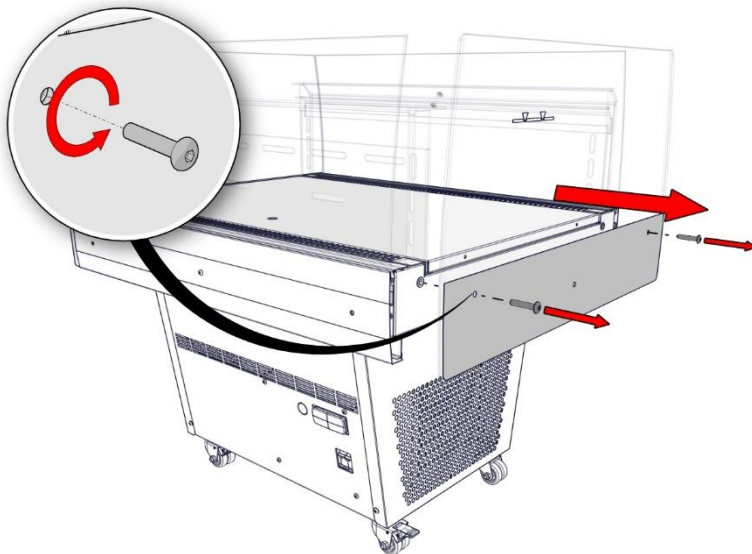
(Optional) Unscrew the bolts from the front and rear bumper brackets. Bolts M6x20 ISO 7380;



(Optional) Remove front and rear bumpers;



(Optional) Unscrew and remove side bumper brackets. Bolts M6x20 ISO 7380;



Unscrew the bolts from the panoramic endwall, remove the endwall from the unit. Bolts M8x40 ISO 7380;

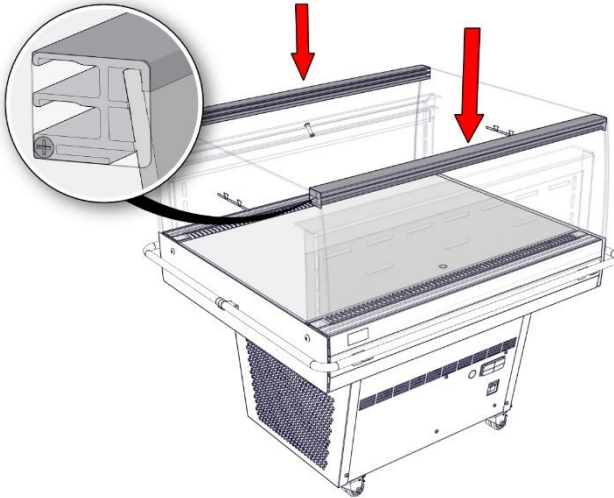
7. ASSEMBLY OF GLASS COVERS



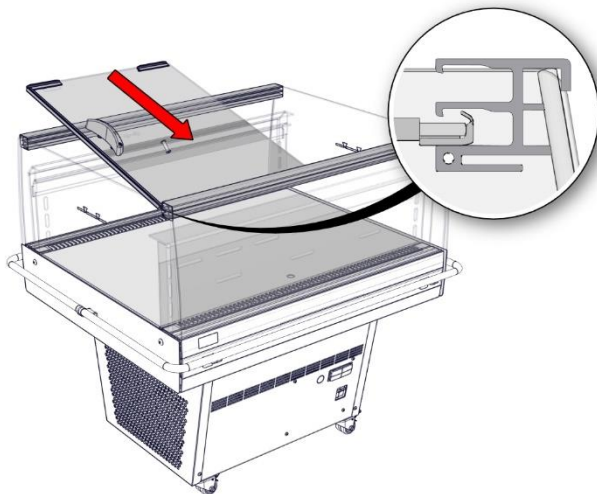
X1



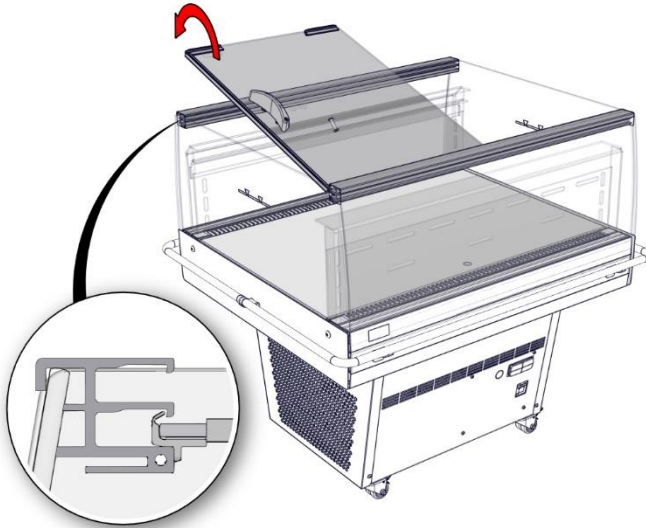
15 min



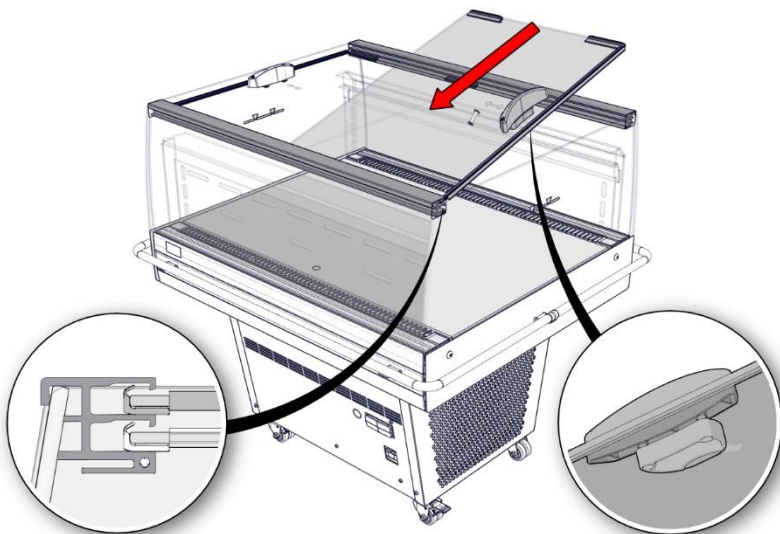
Attach cover rail profiles to the glass;



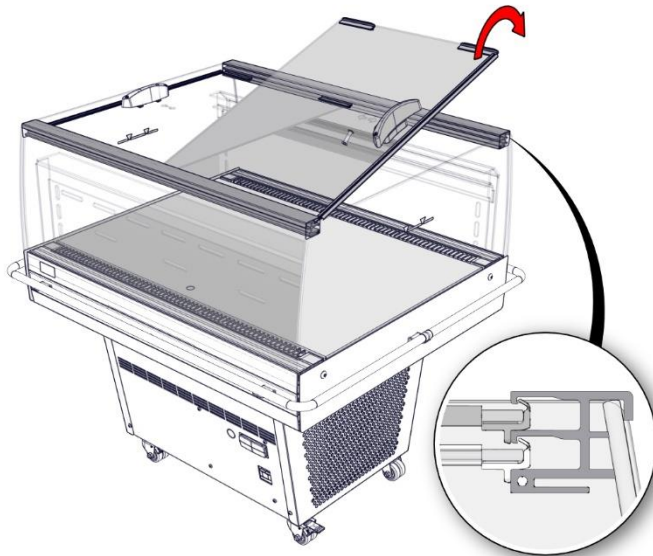
Push first glass (the one without rubber stopper under the handle) into the lower groove;



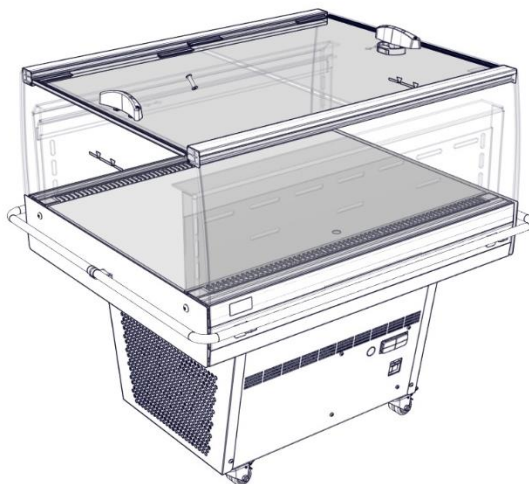
Pull the glass and glass into the lower groove until it is fixed in place;



Push second glass (the one with rubber stopper under the handle) into the upper groove;



Pull the glass and glass into the upper groove until it is fixed in place;



Glass cover after installation;

8. ELECTRICAL CONNECTION

INSTRUCTIONS

It is necessary to regard and follow requirements of the local power supply company in force in the respective region and the nationally valid and applicable standards as well as safety rules!

The network voltage and frequency must match the nominal values indicated on the operating data table of the unit!

The main power supply parameters:



1. Nominal voltage: ~230V/50Hz/1ph

2. Protection switch: C16 30mA (see the Technical Specifications and the identification tag).

Emergency stop of the system

In the event of an emergency, switch off the power switch on the general power supply panel of the refrigerated display case.

9. DRAINAGE

The serve-over IDA Compact S is equipped with drainage into the condensate collection tub that is mounted under the serve-over. It is necessary to check the condensate collection tub for any food remains, sand or larger dust particles.

10. MAINTENANCE



X1



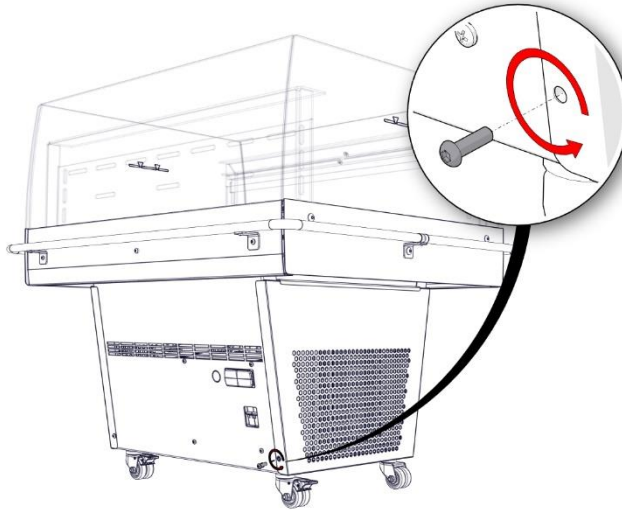
Hex 3, 4



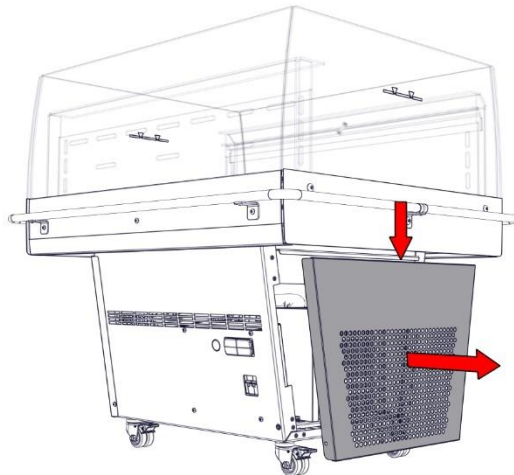
Size 10



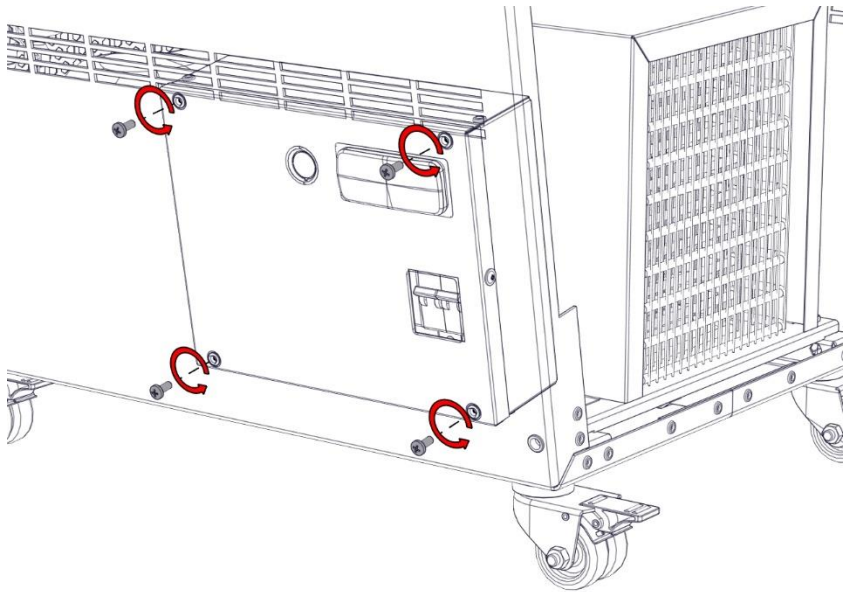
45 min



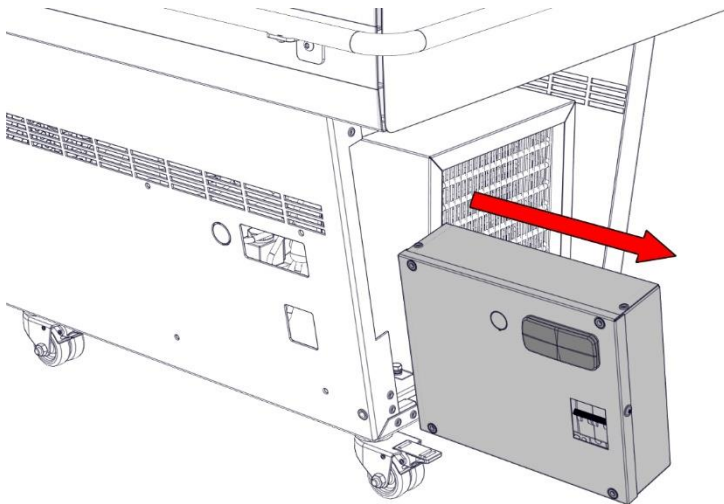
Unscrew 4 bolts. M6x20 ISO 7380 bolts;



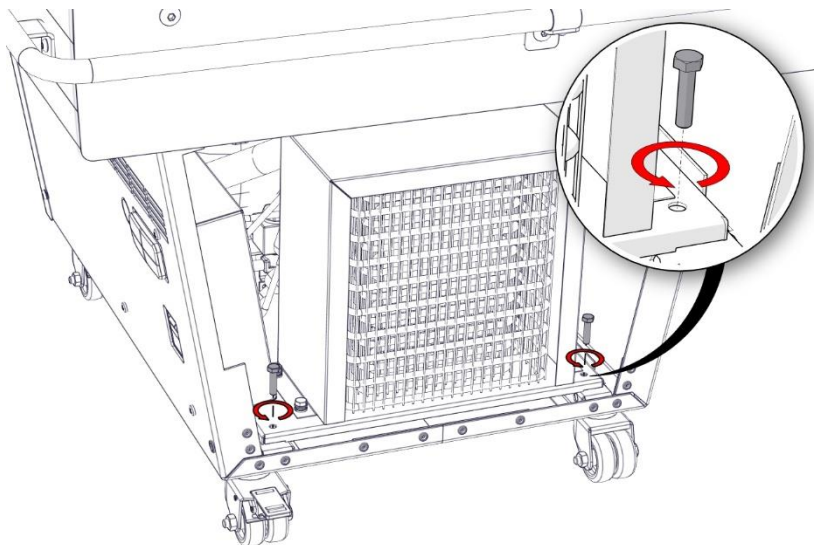
Unmount 2 bottom side plates;



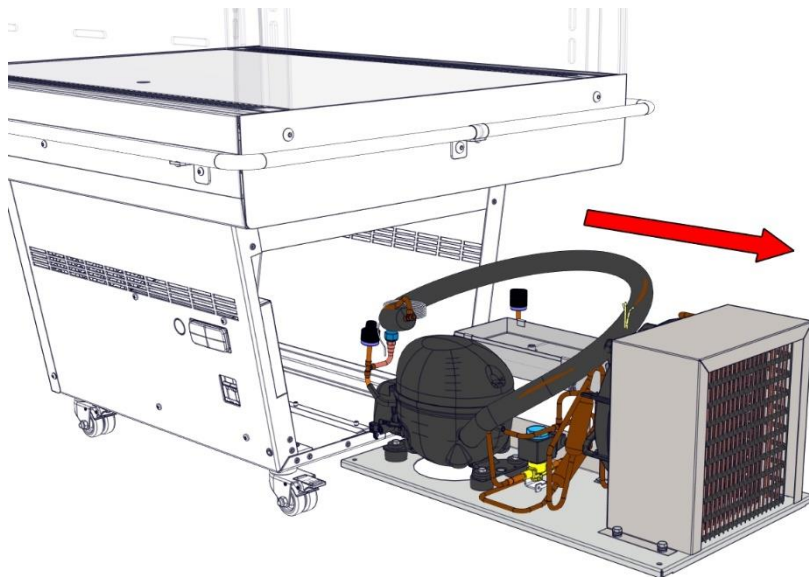
Unscrew 4 bolts. M5x12 ISO 7380 bolts;



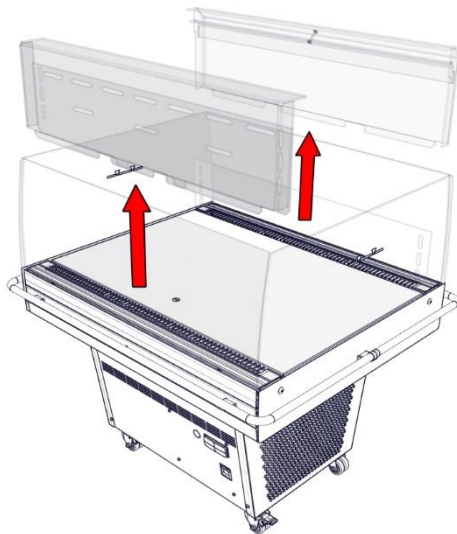
Remove the electrical box from the unit;



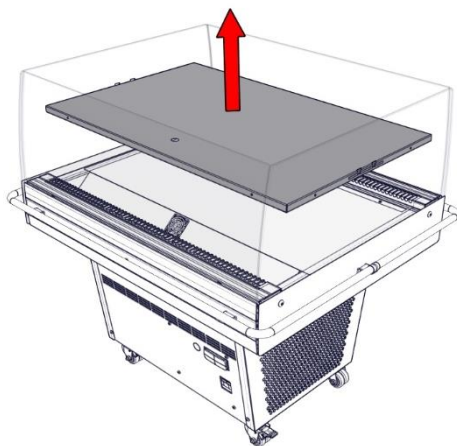
Unscrew 4 bolts. M6x25 DIN 933 bolts;



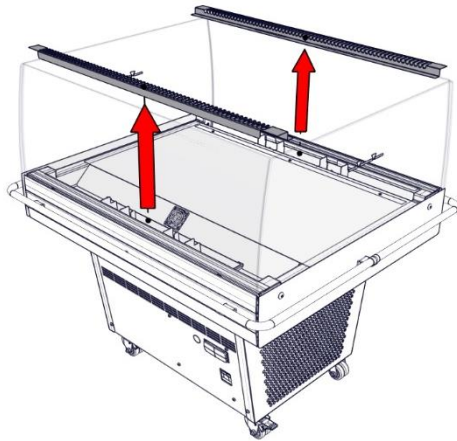
Pull out the unit's base by using the rails;



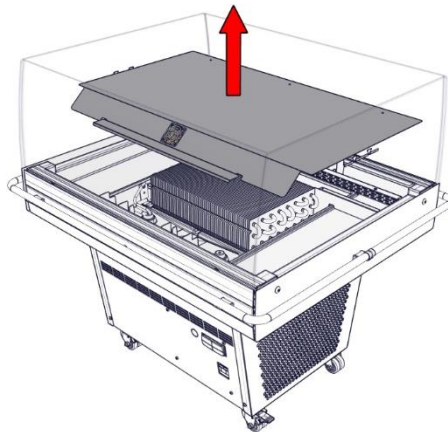
Remove the air ducts. **Note: air ducts are not the same;**



Remove the bottom shelf;



Remove the air grates;



Remove the fan plate to get access to the evaporator, which can be cleaned.

Note: Lift fan plate carefully, don't damage the electrical wires;

10.1. Information on temperatures

Before uploading the products into the serve-over, it is necessary to set the temperature to maintain in the internal space of the serve-over. The temperature is set in control. The temperature should be suitable for display of foreseen products. Recommended temperatures are listed in chapter 2.8.

10.2. Defrosting

Warm ambient air can get into the serve-over. It is very likely when the serve-over is without glass covers or its left open. Due to it, the evaporator can frost. Evaporators must be regularly defrosted using programs set in the control. During the defrosting refrigeration is not run.

10.3. Cleaning

The serve-over must be regularly cleaned, as food products are sensitive to bacteria and microorganisms.

Regular cleaning:

- The serve-over must be cleaned at least once a week. If needed, when contamination is detected, the serve-over must be cleaned more often.
- Serve-over inner space, shelves, interior and exterior plastic, and glass parts of the serve-over must be thoroughly cleaned as well as the floor where the serve-over is installed, must be washed.
- Washing of the plastic parts must be performed using warm water and a non-abrasive cleaning agent dedicated for plastics.
- Metal components must be cleaned using warm water and a non-aggressive, corrosion-free cleaning agent. After washing, it is necessary to remove any moisture residue and to dry up the surface. Chromed surfaces must be cleaned with suitable cleaning agents. After cleaning, they must be dried up with a soft cloth that does not leave dust.
- Painted components must be cleaned with liquid cleaning agents without abrasive materials. It is recommended to use special detergents purposed for painted surfaces. The surfaces must be well dried up after washing. The paint damage can cause metal corrosion at the scratch place.
- Glass parts can be washed using the household window cleaning agents.
- Some units have a wooden finish. Wood and surfaces of wooden products must be cleaned dry. Also, wood polishers can be used. If necessary, surfaces can be cleaned with a damp cloth and then dried thoroughly.
- Protect electrical installations from moisture during cleaning.
- It is necessary to regularly check drainage system.
- Washing the serve-over with high-pressure washers is strictly forbidden.

Deep cleaning

Deep cleaning of the serve-over must be performed once every 4 weeks. The serve-over must be cleaned and disinfected to eliminate pathogenic microorganisms.

- Make sure that defrosting is in progress.
- Remove the products from the serve-over, and temporarily place them in the freezer compartment.
- Disconnect electrical installations.
- Remove the bottom shelves, air circulation grids, and evaporator covers.
- Clean the ventilator of the serve-over from plaque. Remove foreign bodies from the structures of the evaporator and ventilators.
- Make sure that the drainage openings are not clogged, and condensate drains freely.
- Remove dust, possible residue of food products and the condensate residue from surfaces.
- Disinfect the internal space of the serve-over.
- Clean and disinfect detached parts and dry them.
- Assemble the detached components into the structure.
- Switch on the power supply to the serve-over.
- When the temperature in the internal space reaches the one that is specified in the control, bring cooled products back into the cabinet

11. DISPOSAL

A used serve-over can be restored and reused. If it is necessary to completely stop the operation of the refrigerated cabinet, the following steps must be taken:

- Turn off the power supply;
- Disconnect of the glycol piping;
- Collect the refrigerant from the freezing coil;
- The elements of the refrigerated cabinet require specific disposal; therefore, it is necessary to contact organizations that dispose of certain types of materials.

12. STORAGE

If temporary storage and subsequent use of the serve-over is expected (during repair of the shopping premise or change location of the cabinet), the equipment must be stored in a well-ventilated room with temperature higher than 0°C. It is forbidden to leave the cabinets outdoors. It is necessary to put on cover the serve-over or to make other structures protecting the unit against external damage.

13. TESTING

Each refrigerated cabinet is factory tested. During the testing, the following checks are carried out:

- Hermetic tightness;
- Pressure tests of the freezing coil;
- Checks of electrical installation;
- Load tests.

After the multi-decks are installed, each serve-over and the overall system must be inspected before their start-up.

14. ACCESSORIES

Variety of special accessories available on request, such as: night covers, glass doors, lighting, etc. For more information, please call FREOR LT or sales partner.

15. TECHNICAL DATA

15.1. Electrical layouts

The layouts are in the electrical console.

15.2. Failures and troubleshooting



Repair of the internal freezing coil of the serve-over, check the refrigerant amount and replacement of parts may only be carried out by a specialist qualified to work with F and OAM gases.

Only an electrician with the respective qualification may carry out inspection and repair of electrical installation.

Description of controller errors can be found in the instructional manual of the controller manufacturer.

15.3. Control settings

The control settings and information about alarms and signals are stored inside the equipment.

16. MEANINGS OF SYMBOLS

Symbol	Meaning	Type
	Qualified specialist	
	Work clothing	
	Protective gloves	
	Brittle surfaces;	
	Wrench	Sizes: 10
	Screwdriver	
	Hex	3,4,5,6
	Protective goggles	
	Silicone pistol	
	Clamp	

Date	Work	Name

Date	Work	Name

Date	Work	Name

Date	Work	Name



FREOR LT, UAB

Manufacturer of the commercial refrigeration equipment

Katilisikiu St. 92, LT - 02212 Vilnius, Lithuania

T: +370 5 232 9188

E: sales@freor.com

www.freor.com

DOM-H5AXX-S0000E_v1.2

FREOR LT is not affiliated with Chemours or FREON.